Water Contact Diseases (Continued)

- Threat year-round
- Symptoms fever, chills, nausea
- Hospitalization of 1-7 days

Prevention – Do not swim/wade in unapproved water; wash skin and clothing after exposure to freshwater streams/ponds.

Others: Schistosomiasis

ENVIRONMENTAL RISKS

Short-term health risks

- Water contaminated with raw sewage
- Runoff containing fecal pathogens
- Water contaminated with industrial waste
- Exposure to nitrogen oxides, ozone, particulate matter, and sulfur dioxide above standards presenting a risk of transient acute respiratory symptoms

HAZARDOUS ANIMALS AND PLANTS

Venomous Snakes – A great variety are present on all islands of the archipelago: death adders, cobras, kraits, pitvipers, vipers, mock vipers, and forest, vine, tree, keelback, crowned, brown, cat, coral, mangrove, and brownheaded snakes, as well as banded, spotted, and dog-faced water snakes. Many have lethal venom; others can spit venom causing blindness. If bitten, seek urgent medical attention. Wash venom from eyes immediately!

Prevention - Do not handle any snake.

Scorpions and Spiders - Scorpions and large spiders that can deliver painful, nonlethal bites/stings are abundant countrywide; redback spiders are present on all islands and have potentially lethal venom. Seek medical attention if bitten/stung.

Prevention – Shake out boots/bedding/clothing prior to use; never walk barefoot; avoid sleeping on the ground.

Large Reptiles and Mammals – Large crocodiles and lizards are common and can deliver powerful bites; attacks by tigers, bears, feral pigs or cattle cause numerous fatalities. Seek medical attention if bitten.

Prevention – Do not approach or disturb; use caution around river, lake, and ocean shorelines.

Centipedes, Millipedes, and Bees/Wasps – Large and aggressive species present countrywide; capable of inflicting painful bites, stings or secreting/squirting fluids that can blister skin or cause blindness. Seek medical attention if bitten.

Prevention – Shake out boots/bedding/clothing prior to use; never walk barefoot; avoid sleeping on the ground.

Leeches – Common in freshwater ponds and streams and on plant foliage in rainforest areas.

HAZARDOUS ANIMALS AND PLANTS (Continued)

Prevention – Wear DEET on exposed skin; as tactical situation permits, avoid wading in freshwater ponds and streams.

Marine Animals – Sharp corals and venomous fish, seasnakes, shellfish, jellyfish, sea nettles, octopi, stingrays, starfish, and sea urchins are numerous at ocean beaches; large predatory fish, including man-eating sharks, are present throughout the archipelago. Seek medical attention if stung/bitten.

Prevention – Swim at approved beaches; do not handle.

Hazardous Plants – Numerous toxic plants can cause skin/lung irritation if touched/burned and poisoning if chewed/eaten.

Prevention – Do not touch, chew, eat, or burn unfamiliar plants; wash contaminated skin/clothing after contact. Avoid chewing or swallowing any berries, flowers, leaves or plant parts as some will cause systemic poisoning. Some plants have thorns, stinging hairs, or toxic resins that may cause skin irritation, rashes, or infection. Avoid contact with plants if tactically feasible. Avoid burning plants as contact with the smoke may cause skin or lung irritation.

HIGH ELEVATIONS

Operations at 6,000 feet can impact unit and individual effectiveness. Signs of altitude sickness are headache, nausea, vomiting, dizziness, fatigue, irritability, coughing.

Acclimatization:

- Staged Ascent: Ascend to moderate altitude (5,000 to 8,000 feet), and remain there for 3 days before ascending higher.
- Graded Ascent: Limit daily altitude to allow partial acclimatization. Spend 2 nights at 9,000 feet, and limit to no more than 1,000 feet per day above each night's sleep.

Treatment: The preferred method to treat any high altitude illness is to evacuate the individual to a lower altitude. See GTA 08-05-060, A Soldier's Guide to Staying Healthy at High Elevations.

DISTRIBUTION UNLIMITED

Prepared by:



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DEPLOYMENT HEALTH GUIDE: INDONESIA



This country-specific guide should be used in conjunction with GTA 08-05-062, U.S. Army Guide to Staying Healthy, and is intended to provide information that can help reduce your risk of Disease and Non-battle Injuries (DNBI) when deployed. This health threat and countermeasure information is based on the most current data available from U.S. Department of Defense medical agencies at the time of production. In addition to the information in this guide, you should also receive force health protection, health threat, and preventive medicine countermeasures training/briefings prior to and, as required, throughout the length of your deployment.



INDONESIA OVERVIEW

Location – Indonesia is located in southeastern Asia, straddling the equator between the Indian and North Pacific Oceans. Indonesia consists of 13,667 islands of which 6000 are inhabited. Five of the islands account for 90 percent of the land area.

Climate – Tropical monsoonal climate with extensive cloudiness and frequent precipitation. The mean daily temperatures in the lowland areas vary from 70° F to 90° F with a relative humidity of 80 to 90 percent.

Rainfall – Indonesia's wet season is November through March with an annual average rainfall of 45 to 111 inches.

Terrain – Most of the islands consist of rugged volcanic mountains covered by dense tropical forests. Indonesia, the world's most volcanically active region with more than 100 active volcanoes, is also subject to numerous earthquakes.

Forces of Nature – High heat, humidity, flooding and earthquakes

RISK ASSESSMENT

Indonesia is at **HIGH RISK*** for infectious diseases. Without force health protection measures, mission effectiveness will be seriously jeopardized.

*Based on a combination of all major infectious diseases that occur in a country, the Armed Forces Medical Intelligence Center (AFMIC) assigns an overall country risk level of low, intermediate, high, or very high risk, as compared to other countries.

INFECTIOUS DISEASES

Food-borne and Water-borne Diseases

Consuming contaminated food, water, or ice

Diarrhea, bacterial – A potential attack rate of over 50 percent a month could occur if local food, water or ice is consumed

- Threat year-round; countrywide
- Symptoms loose, watery or explosive bowel movements
- Recovery of 1–3 days with antibiotics

Diarrhea, protozoal – A potential attack rate of 1 to 10 percent a month if local food, water or ice is consumed

- Threat year-round; highest in rural areas with extremely poor sanitation
- Symptoms loose, watery or explosive bowel movements
- Recovery of 1-3 days with antibiotics

Food-borne and Water-borne Diseases (Continued)

Hepatitis A – A potential attack rate of 1–10 percent could occur among unvaccinated personnel consuming local food, water or ice

- Threat year-round; countrywide
- Symptoms none to flu-like illness
- Severe, 1–4 weeks recovery, sometimes initially requiring hospitalization

Hepatitis E – A potential attack rate of less than 1 percent per month if local food, water or ice is consumed

- Threat year-round; countrywide
- Symptoms jaundice, fatigue, nausea, vomiting
- Severe, 1–4 weeks recovery, sometimes initially requiring hospitalization

Typhoid/Paratyphoid fever— A potential attack rate of 1 to 10 percent among unvaccinated personnel consuming local food, water or ice

- Threat year-round; countrywide
- Symptoms fever, constipation, headache
- 1–7 days hospitalization

Prevention – Consume only U.S. military-approved food, water, and ice; take hepatitis A vaccine and/or typhoid vaccine, if directed by medical authority.

Vector-borne Diseases

Greatest concern:

Dengue fever - High number of cases possible

- Transmission day-biting mosquitoes
- Threat year-round; risk countrywide, higher in urban areas
- Symptoms debilitating; high fever, severe muscle/joint pain, severe headache, rash
- Hospitalization of 1-7 days likely

Malaria - High number of cases possible

- Transmission night-biting mosquitoes
- Threat year-round; limited areas countrywide, primarily rural; highest risk Papua and Flores Islands
- Symptoms debilitating; fever, chills, sweats, headache, cough, diarrhea, respiratory distress; shock, coma and death in severe cases
- Hospitalization of 1-7 days likely; prolonged recovery or death possible

Chikungunya – Sporadic but high number of cases possible

- Transmission day-biting mosquitoes
- Threat year-round; risk countrywide, higher in urban areas
- Symptoms debilitating; fever, chills, severe muscle/joint pain, vomiting
- Hospitalization of 1-7 days likely

Vector-borne Diseases (Continued)

Others: Rare to small number of cases possible: typhus (murine, flea-borne); typhus (scrub, mite-borne); Japanese encephalitis (mosquito-borne)

Prevention – DEET on exposed skin; permethrin-treated uniforms; permethrin-treated bed nets; malaria prevention pills, as prescribed (critical)

Animal Contact Diseases

Rabies – Exposure to virus-laden saliva of an infected animal through a bite, scratch or breathing airborne droplets; risk is assessed as well above U.S. levels.

- Threat year-round; countrywide
- Initial symptoms pain, tingling, or itching from bite site; chills, fever, muscle aches
- Death likely in the absence of postexposure prophylaxis

Others: Rare cases could occur: Q fever, anthrax.

Prevention – Avoid all animals; if scratched or bitten, seek medical attention immediately; get preexposure and/or postexposure vaccinations if prescribed by medical authority.

Avian influenza (H5N1) – Rare cases could occur in U.S. forces exposed to poultry flocks.

- Transmission direct contact with infected poultry
- Cases have occurred in poultry and humans in Indonesia, with a fatality rate greater than 50 percent in humans.
- Symptoms cough, fever, sore throat, difficultly breathing
- Can cause serious disease and death

Prevention – Avoid all contact with indigenous poultry; thoroughly cook all poultry and eggs.

Sexually Transmitted Diseases

Hepatitis B – Unprotected sexual contact with infected person; contact with infected blood/body fluids. Less than 1 percent per month attack rate could occur among unvaccinated personnel.

- Threat year-round; countrywide
- Symptoms jaundice, fatique, nausea
- Recovery of 1–4 weeks; occasional hospitalization; possible permanent liver damage

Others: Gonorrhea/Chlamydia, HIV/AIDS

Prevention: Abstinence, latex condoms, not sharing needles; hepatitis B vaccine, if directed by medical authority.

Water Contact Diseases

Leptospirosis – Wading, swimming, and other contact with water/mud contaminated with infected animal urine; disease is assessed as present, but levels are unknown.